

## WHAT IS CLAIMED IS:

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1. For use in an information processing system, an apparatus  
for automatically classifying text comprising:

a text classifier controller capable of reading text  
having at least one keyword contained within at least one story  
segment within said text, and capable of identifying keywords  
within each line of said text, and, in response to identifying at  
least one of said keywords within a line of text, classifying said  
line of text as a part of said at least one story segment within  
said text.

2. The apparatus as set forth in Claim 1 wherein said text  
classifier controller is capable of sequentially comparing first  
and second lines of text to compare the number of keywords detected  
for each first line of text with the number of keywords detected  
for each second line of text, and capable of identifying a keyword  
transition point between two adjacent portions of text where the  
number of keywords detected in a keyword category for each line of  
text prior to said keyword transition point decreases below a  
threshold number.

1           3.    The apparatus as set forth in Claim 2 wherein said text  
2 classifier controller is capable of classifying text between the  
3 beginning of the text and a first keyword transition point as one  
4 story segment of the text when said text classifier controller  
5 identifies a first keyword transition point.

1           4.    The apparatus as set forth in Claim 2 wherein said text  
2 classifier controller is capable of classifying text between a  
3 first keyword transition point and a second keyword transition  
4 point as one story segment of the text when said text classifier  
5 controller identifies a first keyword transition point and a second  
6 keyword transition point.

1           5.    The apparatus as set forth in Claim 1 wherein said text  
2 classifier controller is capable of sequentially comparing first  
3 and second lines of text to compare the number of keywords detected  
4 for each first line of text with the number of keywords detected  
5 for each second line of text, and capable of identifying a keyword  
6 transition point between two adjacent portions of text where the  
7 number of keywords detected in a keyword category for each line of  
8 text prior to said keyword transition point increases above a  
9 threshold number.

1        6.    The apparatus as set forth in Claim 1 wherein said text  
2 classifier controller comprises an algorithm for reading lines of  
3 text to identify keywords contained within said lines of text,  
4 wherein said algorithm classifies each line of text in a keyword  
5 category that has the largest number of keywords in said line of  
6 text.

1        7.    An information processing system of the type comprising  
2 a video story segmentation device, a keyword library and a  
3 classification device wherein said information processing system  
4 comprises:

5        a text classifier controller capable of reading text having at  
6 least one keyword contained within at least one story segment  
7 within said text, and capable of identifying keywords within each  
8 line of said text, and, in response to identifying at least one of  
9 said keywords within a line of text, classifying said line of text  
10 as a part of said at least one story segment within said text.



11. An information processing system as set forth in Claim 7 wherein said text classifier controller is capable of sequentially comparing first and second lines of text to compare the number of keywords detected for each first line of text with the number of keywords detected for each second line of text, and capable of identifying a keyword transition point between two adjacent portions of text where the number of keywords detected in a keyword category for each line of text prior to said keyword transition point increases above a threshold number.

12. An information processing system as set forth in Claim 7 wherein said text classifier controller comprises an algorithm for reading lines of text to identify keywords contained within said lines of text, wherein said algorithm classifies each line of text in a keyword category that has the largest number of keywords in said line of text.

1        13. For use in an information processing system, a method of  
2 automatically classifying text comprising the steps of:

3            reading text having at least one keyword contained within  
4 at least one story segment within said text;

5            identifying keywords within each line of said text; and

6            in response to identifying at least one of said keywords  
7 within a line of text, classifying said line of text as a part of  
8 said at least one story segment within said text.

1        14. The method as set forth in Claim 13 further comprising  
2 the steps of:

3            sequentially comparing first and second lines of text to  
4 compare the number of keywords detected for each first line of text  
5 with the number of keywords detected for each second line of text;  
6 and

7            identifying a keyword transition point between two  
8 adjacent portions of text where the number of keywords detected in  
9 a keyword category for each line of text prior to said keyword  
10 transition point decreases below a threshold number.

1 15. The method as set forth in Claim 14 further comprising  
2 the step of:

3 classifying text between the beginning of the text and a  
4 first keyword transition point as one story segment of the text  
5 when said text classifier controller identifies a first keyword  
6 transition point.

1 16. The method as set forth in Claim 14 further comprising  
2 the step of:

3 classifying text between a first keyword transition point  
4 and a second keyword transition point as one story segment of the  
5 text when said text classifier controller identifies a first  
6 keyword transition point and a second keyword transition point.





1        18. The method as set forth in Claim 13 further comprising  
2 the steps of:

3            sequentially comparing first and second lines of text to  
4 compare the number of keywords detected for each first line of text  
5 with the number of keywords detected for each second line of text;  
6 and

7            identifying a plurality of keyword transition points in  
8 said text between adjacent portions of text where the number of  
9 keywords detected in a keyword category for each line of text prior  
10 to each of said keyword transition points decreases below a  
11 threshold number; and

12            classifying the text between each two adjacent keyword  
13 transition points of said plurality of keyword transition points as  
14 a story segment of the text.

1 19. For use in a computerized information processing system,  
2 computer-executable instructions stored on a computer-readable  
3 storage medium for automatically classifying text, the computer-  
4 executable instructions comprising the steps of:

5 reading text having at least one keyword contained within  
6 at least one story segment within said text;

7 identifying keywords within each line of said text; and

8 in response to identifying at least one of said keywords  
9 within a line of text, classifying said line of text as a part of  
10 said at least one story segment within said text.

1 20. The computer-executable instructions stored on a  
2 computer-readable storage medium as set forth in Claim 19, the  
3 computer-executable instructions further comprising the steps of:

4 sequentially comparing first and second lines of text to  
5 compare the number of keywords detected for each first line of text  
6 with the number of keywords detected for each second line of text;  
7 and

8 identifying a keyword transition point between two  
9 adjacent portions of text where the number of keywords detected in  
10 a keyword category for each line of text prior to said keyword  
11 transition point decreases below a threshold number.

1        21. The computer-executable instructions stored on a  
2 computer-readable storage medium as set forth in Claim 20, the  
3 computer-executable instructions further comprising the step of:

4            classifying text between the beginning of the text and a  
5 first keyword transition point as one story segment of the text  
6 when said text classifier controller identifies a first keyword  
7 transition point.

1        22. The computer-executable instructions stored on a  
2 computer-readable storage medium as set forth in Claim 20, the  
3 computer-executable instructions further comprising the step of:

4            classifying text between a first keyword transition point  
5 and a second keyword transition point as one story segment of the  
6 text when said text classifier controller identifies a first  
7 keyword transition point and a second keyword transition point.

1        23. The computer-executable instructions stored on a  
2 computer-readable storage medium as set forth in Claim 19, the  
3 computer-executable instructions further comprising the step of:

4            sequentially comparing first and second lines of text to  
5 compare the number of keywords detected for each first line of text  
6 with the number of keywords detected for each second line of text;  
7 and

8            identifying a keyword transition point between two  
9 adjacent portions of text where the number of keywords detected in  
10 a keyword category for each line of text prior to said keyword  
11 transition point increases above a threshold number.

1        24. The computer-executable instructions stored on a  
2 computer-readable storage medium as set forth in Claim 19, the  
3 computer-executable instructions further comprising the steps of:  
4            sequentially comparing first and second lines of text to  
5 compare the number of keywords detected for each first line of text  
6 with the number of keywords detected for each second line of text;  
7 and

8            identifying a plurality of keyword transition points in  
9 said text between adjacent portions of text where the number of  
10 keywords detected in a keyword category for each line of text prior  
11 to each of said keyword transition points decreases below a  
12 threshold number; and

13            classifying the text between each two adjacent keyword  
14 transition points of said plurality of keyword transition points as  
15 a story segment of the text.